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ABSTRACT

This bibliography is designed to help teachers and administrators effectively address the problems facing them in a time of financial rigor. The citations have been drawn from material appearing over the past five years in ERIC's Resources in Education (RIE) and Current Index to Journals in Education (CIJE), and they address such topics as reduction in force, alternative uses of school buildings, techniques for solving the issues related to declining enrollments and the closing of schools, and practical ways to save money. The citations are divided into two broad categories, higher education and elementary secondary education. (Author)



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RETRENCHMENT IN EDUCATION: SELECTED =RIC RESCURCES

Michael J. Butler, Compiler

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FOREWORD

The entire educations remnunity, along with the rest of American society, is being but ted by a storm of adverse circumstances. Rising mests in sales, equ pment, and facilities, a restive voting public and state and federal legislatures closely listening to this police, and decreasing enrollments are comfron ng an enca oral system which has raised higher proportion of its clients to a post-literate level than any the 1960s and 70s, education received a huge and of other. financia support from national, state, and local governments. In part, mis support was mecessitated by the post-war "bat" boom," but in part, is was targeted to raise the mean ty of education across the mountain Now, however, educators as a levels, ami administra bus who manage the schools where they teach, must be mare more than ever of the costs and benefits accruing mom the ways schools are run.

This mibliography is designed to help teachers and administrators effectively address the problems facing them in a time of Emancial rigor. The citations have been drawn from materials appearing ower the past five years in ERIC's abstract periodica s Resources in Education (RIE) and Current Index to Journals in Education (CIJE), and they address such tomics as reduction in force, algernative uses of school buildings, techniques for solving the issues related to declining enrollments and the clasing of schools, and practical ways to

save mone:.

The citations are divided into two broad categories, higher education and e mentary/secondary education. Within these sections, the materials are subdivided to distinguish RIE selection from CIJE. In some ways, the differentiation between higher and elementary/secondary education artifica , because both educational sectors face similar problems and im many cases will develop solutions which are more alike to different. It is suggested that much would be gained by reading the entire manuscript, no matter where the reader's interes = Tie.

Ordering information for both RIE and CIJE citations is found in 33 final pages of the book.

> MICHAEL J. BUTLER Associate Director ERIC/Teacher Education



RETRENCHMENT IN HIGHER EDUCATION

Citations from Resources in Emcation

Ahrens, Stepmen W. Stepment Enrollment Forecasting
Techniques for Higher Education. Oct 1979 33p. Paper presented at the Annual Commerence of the Southern Association for Institutional Research (Orlando, Florida, October 1979). EDR Price MF01 PC02 Fius Postage Parious techniques used by stare agencies, secondary schools, community colleges, and large universitie forecast encolines are described and guidelines for constructing forecasting procedures are outlined. forecasting tommiques are divided into three categories: quantitati: miniques based on historical data that attempt curve fit (2) causal mode's that incorporate historical data and rely = a elationship between enrollments and other parameters or techniques incormorating subjective judgment rather that qualitative measures; and (3) qualitative techniques utilizing surmers to determine potential students and to modify or suggest adjustments to previously developed forecasting techniques. The selection of mappropriate forecast methodology is dependent or both the resc ces available and the character: Stics of the instit-tion. The statistical methodology involved in each forecasting schnique is detailed. It is suggested that changes in face ty supply and demand, facility needs, are educational economics have increased the importance of accurate = rollment projections. Through accurate forecasting, input for toth long- and short-range planning can be compiled. ED 180 3=.

Beemen, Alice L. Wilson College: A Case Study. Aug 1979 Presared for discussion at a Lilly Endowment seminar for Indiana Independent Colleges and Universities (October 10, 1979). Available from Pennsylvania Association of Colleges and Universities, 800 N. 3rd St., Harrisburg, PA 17102. EDRS Price MF01/PC03 Plus Postage. The attempted closing of Wilson College in Pennsylvania, a 110-year-old liberal arts college for women, is recounted. In 1978 the board of trustees voted to close the college and preserve remaining assets for other educational purposes. A movement arose to save the college, and subsequent litigation resulted in rulings in May 1979 that: (1) two trustees must leave the board; (2) the board must continue operating the college as a teaching institution; (3) the board had exceeded its authority in closing the institution and forming a foundation without authority from the court; (4) trustee defendants must pay court costs, but not from college funds; and (5) the court would retain jurisdiction over the college. The account is told by a trustee who favored the closing, and draws upon board records from 1970 to 1979, college officials' reports, accreditation and consultants reports, the press, and interviews with trustees, administrators, and faculty. Appended are a memo containing another trustee's comments on the account, a copy of the court decree, and a reprint of an editorial entitled



"Judicial Overkill" from the September 1979 issue of Change Magazine. ED 184 433.

Bieschke, Suzanne M. Retrenchment Review. Sep 1978 77p. Available from Planning Office, University of Carifornia, San Diego, CA. EDRS Price MF01/PC04 Plus Postage. Thris review of retrenchment in higher education covers background information, basic concerns, suggestions for making cuts, and lessons learned from experience. Contents concern financial pressures, enrollments, faculty relations during retrenciment, services and programs during retrenchment, administration during retrenchment, and case histories of retrenchment action at specific colleges and universities. Specific topics include: enrollment trends and projections, attrition and retention, faculty development, faculty turnover and tenure ratios, alternatives to tenure, collective bargaining, student/faculty ratios, Exculty reduction, student services administration, zero-based budgeting, the decision-making process during retrenchment, public funds, tuition, external funds, and operations. Some important steps that higher education institutions should take to prepare for retrenchment are suggested. Extensive notes and a bibliography are included. ED 168 421.

Bliss, Leonard B.; Dodds, Jon H. A Study of Undergraduate Perceptions of the Status of the Teaching Profession in Determining Strategies for Dealing with Declining Enrollment in Teacher Education. 5 Apr 1977 21 p. Paper presented at the Annual Meeting of the American Educational Research Association (New York, New York, April 4-8, 1977). EDRS Price MF01/PC01 Plus Postage. Using a pilot version of an instrument designed to probe perceptions of undergraduates in areas related to teaching as a profession and the desirability of teacher education programs, this study begins to develop a base upon which to formulate strategies for understanding and dealing with decrining enrollment in teacher education programs. A branching questionnaire, which asked subjects to respond only in those areas relevant to their own experience, was sent to a sample of students enrolled at the State University of New York College at The data indicate that: (1) perceptions of the actual Postdam. conditions within the teaching profession do not seem to act as strong determiners in career decisions; (2) subjects do not seem concerned with salary, career status, safety, and the nature of the client; (3) teacher education programs are perceived as highly vocationally oriented and useful only in obtaining positions in the teaching profession; and (4) students may be forming their percepions from informal and not completely accurate sources. The results tentatively suggest two strategies for dealing with declining enrollment: first, altering students perceptions in relation to the employment outlook of college graduates so that it is more in tune with reality; and second, making undergraduates more aware of the possibilities of education as a profession. (A sample questionnaire is included.) ED 137 295.

Bowen, Frank M.; Glenny, Lyman A. <u>Uncertainty in Public Higher Education:</u> Response to Stress at Ten California Colleges



and Universities = Report to the California Postsecondary Education Commission. Jan 1980 75p. Available from: Fostsecondary Francion Commission, 1020 12th Street, Sacramento, CA 95814. EDRS - me MF01/PC03 Plus Postage. In May 1979 a survey of ten Latricarnia public postsecondary institutions was undertaken, at the request of the state commission, to learn the impact of enrol "ment and financial uncertainty on the institutions. Serveyed were the following community college districts: El Camino, Mt. San Jacinto, San Jose, San Mateo County, and Sam Diego; also surveyed were the California State University at Mominguez Hills, California State University at Hayward, San Diego State University, the University of California at Davis, and the University of California at Los Angeles. Questionnaires were sent to the chief executive officers, and field interviews were conducted. Results are discussed in this report under five chapter headings; (1) the character of uncertainty (such factors as enrollment, budget, collective bargaining, accountability requirements, student preparation, shifting student interests, physical plant, and unclear governmental prolicies) and uncertainty's differential impact on segments of the institution's community; (2) the concept and context of stress as it is studied here; (3) institutional response; (4) institutional processes for the orderly resolution of program planning and budgeting issues (governance, budgeting, planning, and program review); and (5) concluding observations regarding institutional procedures and autonomy, coordination and control, state government, and comunity services policy. It is suggested that virtually all of California's public higher education institutions will survive as organizational entities; but to do more than simply survive, they must maintain program quality and processes that impose order on uncertainty to the extent possible. Adviscry committees for the survey are listed. ED 184 385.

Brooks, Norward J. The Future of Community Colleges. 1980 21p. EDRS Price MF01/PC01 Plus Postage. Declines in financial resources and enrollment, and competition for students are seen to be principal factors in the future of community colleges. Resources have been diminished by cutbacks in federal and state funds, declining enrollment, the underrepresentation of nontraditional students in formula funding, and inflation. Headcount enrollments have been increasing due to the nontraditional student population, but at a decreasing rate. Community colleges are competing for students with proprietary schools as well as other postsecondary institutions, partly due to a recent wider availability of student aid. It is proposed that the challenge to community college administrators is to find underserved groups and new student constituencies whom the college can serve even under current uncertain conditions of public financing. Among these groups may be the blind and deaf, women over 25, and the educationally disadvantaged. New modes of articulation and cooperation with other agencies are needed. This will probably affect the hiring practices for faculty and administrators, perhaps adversely. ED 184 474.



Brooks, Norward J. The Future of Comprehensive Colleges and Universities. 19 Feb 1980 25p. EDRS Price MF01/PC01 Plus Postage. Comprehensive colleges and universities -- often former normal schools that have grown quickly in recent years--are seen to be affected primarily by declining financial resources, declining enrollment, and competition, now and in the near future. Financial resources are affected by higher priority placed on other state budget items, tax limitation movements, retirement and disability programs claiming more funds, declining return on endowments, and inflation. Concurrently, there is pressure to serve new populations without adequate compensation for added costs. Enrollment of traditional students is declining, but nontraditional students are being actively recruited. Although this may help enrollment rates, it may also contribute to a lowering of academic standards. Competition is seen to come from "degree mills," i.e., colleges with low standards, and from accredited private colleges and universities. Collective bargining and tenure may affect staffing patterns. It is felt that the challenge to the comprehensive colleges and aniversities lies in finding new opportunities to employ resources at hand to best serve the higher education community. They may do this in part by lobbying to change public policy and

by minimizing competition. ED 184 473.
Brooks, Norward J. The Future of Research Universities. Mar 1980 37p. EDRS Price MF01/PC02 Plus Postage. It is proposed that research universities are a vital component of higher education in the United States because of cultural and intellectual leadership, research potential, and professional and technical human resources to translate research into social, industrial, and economic action. Their future in view of declining enrollments and financial resources is discussed. Major factors seen to affect them are limited financial resources and its ramifications: complex competition for state funds; alleged over and underproduction of highly trained personnel; inadequate means for assessing costs and benefits of graduate education and research; and inconsistent criteria for establishing and dismantling graduate programs. The high undergraduate dropout rate is viewed as contributing to the problems of research universities, and may be a result of the decline of general education, an emphasis on graduate programs, an emphasis on faculty research and publication, and growing departmentalization. Other factors affecting the future of these institutions are competition among universities and collective bargaining for the faculty. ED 184 475.

Brooks, Norward J. The Future of Private Colleges. Mar 1980 22p. EDRS Price MF01/PC01 Plus Postage. While elite private colleges may survive the enrollment declines of the 1980s and 1990s, the less elite, so-called invisible private colleges may have more difficulty. Finance, enrollment, and competition are the three major elements seen to threaten these institutions' futures. They face an uncertain financial future since historically they receive less federal and state funding than their chief competitors, the comprehensive colleges and

universities. The small colleges may have to change their characters and consitituencies in order to compete for funds. Some options are discussed, including lowering faculty salaries or using unrestricted endowments for operating costs. Enrollment decline may also be especially great in these traditionally nonvocational colleges. In the area of competition, the major difference between the small colleges and their rivals, the two-and four-year public colleges, is that the former can offer greater diversity. It is noted that the new roles and loss of diversity accepted by small colleges in reaction to enrollment declines may have spawned unfortunate compromises. ED 184 476

Brown, Kenneth G.; And Others. Uses of National Data Systems by Institutional Researchers: Implicatons for the 1980's. AIR Forum 1980 Paper. Apr 1980 21p.; Paper presented at the Annual Forum of the Association for Institutional Research (20th, Atlanta, Georgia, April 27-May 1, 1980). EDRS price MF01/PC01 Plus Postage. A research project underway at the University of Arizona is described, and the usefulness of the national data system of the Higher Education General Information Survey (HEGIS) to institutional researchers, as well as some drawbacks of the system, are considered. The need for institutions to have data on enrollment, budgets, and faculty/students that can be compared to other schools is noted. Technical and operational problems of HEGIS data tape use are examined and statistical tables illustrating the difficulties are included. An advantage of the HEGIS system is that data can be compared within any given year and, in many cases, longitudinally. The use of national data sources in building models to illuminate enrollment trends and isolate associated variables is illustrated by a University of Arizona project that was designed to formulate disaggregated national, regional, and state enrollment forecasts by enrollment-change categories and by institutional classification. The role of economic, societal, and institutional variables in enrollment trends is another focal area. The files for accomplishing this project have been assembled from HEGIS. Office of Education, and Census Bureau data. ED 189 947.

Clark, David L. The Real World of the Teacher Educator: A Look to the Near Future. Mar 1977 30p. 18th Annual Charles W. Hunt Lecture presented at the Annual Meeting of the American Association of Colleges for Teacher Education (29th, Chicago, Illinois, March 1-4, 1977). EDRS price MF01/PC02 Plus Postage. Eight predictions present a view of the near future (five to seven years) for schools, colleges, and departments of education (SCDEs). Prior to discussion of the predictions, five common errors in planning which undermine efforts to generate reality-based action plans are introduced. They are: (1) overgeneralization and undersimplification; (2) overemphasis on external impact factors; (3) overestimation of the malleability and/or negative consequences of contextual factors; (4) assumption of the inevitability of futures; and (5) the practice of problem displacement. With these errors in mind, the following eight predictions are ventured: (1) there will be a



decrement in real funds available in SCDEs to support the range of basic functions assigned to such units; (2) enrollment in teacher education programs will continue to decline and funds to support the instruction functions of SCDEs will also decline; (3) fiscal support for knowledge production activities or research and development in SCDEs will decline; (4) fiscal support of SCDE involvement in knowledge utilization activities will increase; (5) program quality in SCDEs will decline; (6) current perceptions neld by some clients and policy makers that SCDEs are not performing adequately in either teacher education and/or knowledge utilization programs will increase; (7) there will be a loss of autonomy for SCDEs in program development, operation, and evaluation; and (8) changes in the form and structure of teacher education will be more likely than changes in its substance. SCDEs follow the course predicted above, the upcoming five years can be defined, using economic terminology, as a recession. ED 134 566.

Conflict, Retrenchment, and Reappraisal: The Administration of Higher Education. The David D. Henry Lectures, 1972-78. 166p. Available from University of Illinois Press, 54 E. Gregory Drive, Box 5081, Station A., Champaign, IL 61820. Document not available from EDRS. The first five David D. Henry lectures are presented in this book. Following a brief introduction by John E. Carbally and a biography of David Dobbs Henry, Clark Kerr's The Administration of Higher Education in an Era of Charge and Conflict," focuses on change and conflict as major elasmic in the future of higher education. Responses by Harry Broudy and Eldon Johnson follow. The second lecture by David Riesman, "Can We Maintain Quality Education in a Period of Retrenchment?" and five questions and responses concerning the paper are presented. "The Administration of Education for the Health Professions; A Time for Reappraisal" by John R. Hogness, with comments, questions and discussion following, focuses on the need to take a fresh look at the organization and management of educational programs for the health professions. The fourth lecture, "The Education of Administrators for Higher Education," by Harlan Cleveland, discusses the requirements of educational leadership. A response by John Corbally and questions and discussion follow. The final lecture by Howard R. Bowen, "Socially Imposed Costs of Higher Education," examines such costs as requirements related to due process, work standards, access to education, and right to information. A 31-item bibliography is appended. ED 181 774.

Deitch, Kenneth M. Some Aspects of the Economics of Higher Education. Working Paper. Jan 1978 164p. EDRS Price MF01/PC07 Plus Postage. A discussion of the economics of higher education begins with an outline of the history of higher education, and a profile of American postsecondary institutions in the recent past and the present. An analysis of the outlook for enrollment follows. Data are given on enrollment trends since 1951, according to sector (public versus private), institution type, and degree level and subject area. Demographic profiles illustrate a forecast of enrollment trends through the year



2,000. The geographic distribution of the traditional college-age population is outlined, and graduate and professional education populations are also discussed. Financial data on recent funding and funding trends in private and public institutions and on faculty illustrate a discussion of revenue and fiscal capacity, especially as they are affected by the federal government. It is concluded that increasingly intense competition for students will be important in higher education economics in the 1980s, and that there will be continuing efforts to economize. The intellectual vitality of the faculty is seen as important to the health of higher education, though the demand for new, younger faculty members is forseen to be very small in the near future. Appended are a list of references and suggestions for further reading. ED 184 444.

Delon, Floyd G. Reduction in Force: Legal Implications. Chapter 9 of Contemporary Legal Issues in Education; 1979 13p. not available separately. Available from the National Organization on Legal Problems of Education, 5401 S.W. Seventh Avenue, Topeka, Kansas 66606. Not available from EDRS. paper looks at recent court litigation stemming from reduction in teaching force in school districts. First it discusses those cases in which constitutional questions were raised, including charges of racial discrimination and infringement of both procedural and substantive rights. Next it looks at statutory issues where most of the reduction-in-force litigation falls. Examples of the latter include issues of seniority and tenure, legal qualifications, right to notice and hearing, sufficiency of evidence supporting the decision, and call-back rights. Finally, the paper discusses contract issues, including individual contracts and collective bargaining agreements. The conclusion states that reduction-in-force decisions are more likely to survive judicial scrutiny (1) when made on a nondiscriminatory basis, (2) when carried out in compliance with well-formulated policies, (3) when separated from dismissal for cause decisions, (4) when supported by documentation, and (5) when constitutional and statutory procedural requirements and collective bargaining agreements are ollowed to the letter. ED 170 843.

Dougherty, Edward A. The Role of Institutional Research in Program Discontinuance. AIR Forum 1979 Paper. May 1979 17p. Paper presented at the Annual Forum of the Association for Institutional Research (19th, San Diego, California, May 13-17, 1979). EDRS Price MF01/PC01 Plus Postage. Probl ms relating to program discontinuance and the role of institutional research are discussed, drawing on a study supported by the Exxon Foundation of ten predominantly large public universities that have either reviewed and closed programs or have gone through recent financial difficulties. Careful analysis is necessary to know that savings are possible in the long- or short-run as a result of program discontinuance. Program discontinuance requires assessment of the impact of making marginal shifts in the allocation of resources. Program closure is extremely time-consuming, comparable data for the units under review are needed, and there is a lack of accepted standards for measuring



research productivity. There is also a lack of clear definition of institutional mission. Four basic questions that must be addressed concerning program review are: who has the authority to review? What programs will be reviewed? What criteria will be used? And, what procedures will be most appropriate to the situation? The role of state agencies, what can be done to avoid discontinuance, and actions that should be taken if closure is desirable and inevitable are discussed. ED 174 081.

Dougherty, Edward A. What is the Most Effective Way to Handle Program Discontinuance? Case Studies from 10 Campuses. 18 Apr 1979 42p. Paper presented at the American Association of Higher Education National Conference (Washington, DC, April 18, 1979). EDRS Price MF01/PC02 Plus Postage. Effective ways to handle program discontinuance were studied based on experiences at 10 campuses. Two variables that were considered to be institutional approaches to financial difficulties are the degree of financial difficulty and the degree of control exercised by the institutional leaders. The study sample was drawn primarily from large public research universities in the United States, although two smaller regional campuses and one large private research university were also included. Key administrators and faculty were interviewed, and data were collected from a variety of written documents, such as financial statements, program review documents, and annual reports. Representatives of state agencies were also interviewed in states where there are active coordinating or governing agencies. Five areas were examined: financial crisis, control and leadership, the role of the state agencies, the review process, and the process of program discontinuance. Recommendations to avoid discontinuance and actions required if closure is desirable or unavoidable are offered. ED 181 789.

Gruson, Edward S. State Regulation of Higher Education in a Period of Decline. Apr 1979 106p. EDRS Price MF01/PC05 Plus Postage. The 50 states are responsible for public systems of higher education, and accomodate 80 percent of the total higher education enrollment. With growth and large expenditures of state funds in recent years has come increasing state regulation of higher education. In many instances institutional autonomy has been threatened by state action. Six recommendations are made for the public sector to appropriately and efficiently adapt to enrollment declines: (1) states should use a consolidated governing board combined with institutional boards to focus responsibility; (2) public research universities must be maintained, undiluted, as the foremost institutions in the public sector; (3) a funding formula consisting of a base grant plus a grant per full-cime equivalent student, rather than being tied to enrollment, would offer institutions a chance to maintain quality while clarifying their missions in the public system; (4) the licensing function for both private and public institutions should rest in the state higher education agency; (5) institutions must be willing and capable of adopting improved management techniques to maximize returns from the public funds available; and (6) a peer review system for monitoring



educational quality should be used rather than monitoring by state agencies. ED 184 446.

Henard, Ralph E. The Impacts of the Faculty Workload Emphasis on Postsecondary Education in the 1980s. AIR Forum 1979 May 1979 21p. Paper presented at the Annual Forum of the Association for Institutional Research (19th, San Diego, California, May 13-17, 1979). EDRS Price MF01/PC01 Plus Postage. The implications of faculty workload and formula budgeting issues on higher education in the 1980s are discussed. Because of declining enrollments and tight resources it is suggested that state legislative committees in the 1980s will accelerate their requests for faculty workload data related to formulas for the allocation of full-time faculty. Executive officers of state commissions or state boards of higher education in the United States were surveyed to determine the effect of faculty workloads on appropriatons. In more than one-half of the responding states, the survey indicated that faculty workloads would affect appropriations. Impacts of this concern over faculty workloads increased state encroachments in academic. decisionmaking, reduction of the quantity and quality of research, more state control over what is taught because of the emphasis on student credit-hour production, and an increased unionization of faculty. It is suggested that these impacts could prompt institutions to develop faculty workload formulas as a protection against the use of inadequate workload measures by state committees. ED 174 075.

Ishler, Richard E. Institutional Planning for a Declining Enrollment. Jul 1979 13p. Paper presented at the International Conference on Improving Higher Education (5th, London, England, July 1979). EDRS Price MF01/PC01 Plus Postage. Many institutions of higher education are being faced with declining enrollments accompanied by a reduction in human and financial resources. As a result, long-range planning has become imperative. This paper discusses how the planning process evolved and was conducted at Emporia State University in order to cope with the projected enrollment decline over the next five years. Included are a discussion of the factors and conditions which instigated the planning, the development of the plan, faculty involvement, and a discussion of the components which are included in each department's plan. ED 185 032.

Kershaw, Joseph A. Government and Higher Education in New York State. (1980) 45p. EDRS Price MF01/PC02 Plus Postage. New York State's higher education system is threatened by external conditions: reduction in college-age population, a private sector threatened by an emerging state system, an end to growth in state financial support, and a rapidly growing New York City system. Whether the state can adjust rationally to these conditions is examined, and the possiblities for coordination of state and federal intervention are discussed. New York's higher education system is outlined, with some attention given to decision making in the state bureaucracy. The student financial aid situation is examined, and it is noted that the two large state and federal aid programs, which operate side by side,



differ in important ways and may in some ways be incompatible. The annual budget decision processes for the State University of New York and the City University of New York are detailed and discussed as they cope with the steady state conditions ahead. A look into the near future suggests that a downturn of demand for higher education may be as much as 15 to 20 percent, research funds are likely to decline, and state authorities will have to decide whether to selectively close institutions or selectively reduce programs at all institutions. ED 184 417.

Kintzer, Frederick C. Froposition 13: Implications for Community Colleges. Topical Paper Number 72. Aug 1980 39p. EDRS Price MF01/PC02 Plus Postage. This review of tax limitation legislation and its impact on the community college, begins by examining the provisions of this type of legislation, its historical precedents, the extent to which tax limitation legislation was passed in the 1970s, and its implications for local control of community college services. Next, it is noted that representatives from seven states reported that little or no impact had been felt from tax limitation legislation on community college education. In contrast, reports are then presented from 17 states, which detail changes in educational mission and college programming, governance and management, staffing, and financing that are directly attributable to such legislation. The report concludes with a review of the literature, providing numerous suggestions for dealing with cutbacks through tactical changes in institutional operation, new approaches to teaching and learning, program budgeting, resource development programs, alliances with community agencies and industry, extending experiential learning, and volunteerism. A bibliography is provided. ED 188 711.

Lasher, William F.; And Others. A Comprehensive Technique for Forecasting University Enrollment, Instructional Workloads and Funding Levels. AIR Forum 1980 Paper. Apr 1980 33p. Paper presented at the Annual Forum of the Association for Institutional Research (20th, Atlanta, Georgia, April 27-May 1, 1980). EDRS Price MF01/PC02 Plus Postage. Analytical techniques developed by the University of Texas at Austin to deal with problems of forecasting enrollments, instructional workloads, and funding levels are considered. In order to estimate university emrollments, Texas public high school graduate levels were projected, in-migration rates were separated from survival rates, progression/continuation rates were established for each age group in each grade, and a range of enrollment projections for entering freshmen were developed. A method was also developed to estimate transfer enrollments. Once attrition/retention rates for each group of entering students were determined, the rates were applied against the projected enrollments of first-time freshmen and transfers in order to estimate total undergraduate enrollment for five years. Although comparable methods for projecting graduate enrollment have not been developed, a number of variables have been considered in making this projection. Techniques for forecasting future instructional workload and funding are also examined. ED 189 974.



Mayhew, Lewis B. Surviving the Eighties. Strategies and Procedures for Solving Fiscal and Enrollment Problems. 1979 350p. Available from Jossey-Bass Inc., 433 California Street, San Francisco, CA 94104 (\$13.95). Not available from EDRS. survival of higher education institutions is addressed in this book. Strategies and procedures for assuring institutional vitality are outlined, based on the author's 30 years of studying and advising colleges and universities in various states of financial health. The major components of institutional vitality are enumerated, including a well-defined educational mission and clientele, unified administrative leadership, and vigorous cost control. Identified are those institutions in greatest danger, such as privately-supported colleges lacking a distinctive purpose and identity. Chapters discuss such topics as: improving administrative structures, policies, and leadership; management systems for handling crisis and development; anticipating and planning for the future; defining educational mission; enrollment improvement; faculty performance and cost; and implementing survival strategies. A reading list is provided at the end of each chapter for in-depth study. Avoiding error is offered as the remedy for future problems, best accomplished by having adequate consultant and administrative support keenly aware of all the functions of the higher education system. An appendix offers suggestions for increasing income. Also provided are additional references and an index. ED 181 811.

McDaniel, Walter A.; Gullo, Philip T. Faculty Retraining for Lateral Transfer: An Alternative to Reduction in Force in Community Colleges. A Study and Progress Report. 27 Dec 1978 40p. EDRS Price MF01/PC02 Plus Postage. Declining enrollment and financial setbacks faced by California community colleges have necessitated discontinuing programs and terminating the services of experienced, tenured, certified personnel. Laws and policies in California, Connecticut, and at Miami-Dade (Florida) relating to reduction in force (RIF) are discussed in terms of termination and rehiring of faculty, and of the traditional RIF alternative policies, which rely on dismissal of part-time staff. Retraining faculty for lateral transfer is presented as an alternative to layoffs among tenured college faculty members, whereby a classified or certified employee transfers from the department of original employment to another for which another credential is required. The faculty retraining experiences of the State University System of Florida, the State University of New York, the State University College of Pennsylvania, and the University of Wisconsin System are described and related to an outline for staff development and lateral transfer policies for certified positions at Palomar College, California. A review of California's enabling legislation and of professional growth policies precedes a summary of the views of Charles Neff, in favor of faculty retraining, of the opposing views of John J. Wagner, and of the disparate feelings in evidence in the Los Angeles Community College District. A bibliography is appended. ED 164 042.

Mortimer, Kenneth P.; Tierney, Michael L. The Three "R's" of the Eighties: Reduction, Reallocation, and Retrenchment. 1979 93p. Available from the American Association for Higher Education, One Dupont Circle, Suite 780, Washington, DC 20036 (\$4.00). EDRS Price MF01/PC04 Plus Postage. Some of the responses of colleges and universities to declining enrollments and diminishing resources are reviewed. Institutions have tried to reduce the size of their operations, reallocate resources internally, and retrench a number of faculty and programs. Several approaches to reductions, reallocations, and retrenchments in specific cases, including those at the University of Michigan, the University of Pennsylvania, and the Pennsylvania State College System, are reviewed. Nine observations about trends in institutional behavior as colleges and universities approach the decade of the 1980s are presented, including: there is a need to be more sophisticated about projected enrollment declines since they and their impacts will vary by region of the country; national concentration on projected enrollment declines has diverted attention from the equally important area if the "cost-income squeeze;" and traditional governance patterns in colleges and universities are not well-equipped to handle faculty participation in an era of declining resources. It is concluded that only a few institutions, which either are geographically located in areas of population growth or have execptionally high academic reputations, will escape the consequences of the long-run changes facing higher education. Appended are checklists for academic quality assessment and program evaluation; guidelines for use in planning retrenchment in the state colleges and University of Pennsylvania; the 1976 recommended institutional regulations on academic freedom and tenure; a policy document on discontinuance of academic programs at the University of Michigan; and a financial exigency and staff reduction statement of the Association of American Colleges. A bibliography is included. ED 172 642.

Problems and Outlook of Small Private Liberal Arts Colleges. Report to the Congress of the United States by the Comptroller General. 25 Aug 1978 107p. EDRS Price MF01/PC05 Plus Postage. The problems and outlook of small private liberal arts colleges are examined with regard to: the segment of private higher education that is in financial trouble, and the reasons for this trouble; the actions being taken by such schools to remedy their problems; and the effect of federal and state programs on the financial status of these institutions. An introduction considers the rationale for the study and details federal support for higher education, classifications of private higher education, and the scope of the study. The dilemma of private education is surveyed, including declining enrollment growth, a growing tuition gap between public and private sectors, and growth of the community college system. The financial crisis of the private college is analyzed, focusing on the severity of the problem and reasons for serious financial trouble. Efforts to improve financial conditions are considered, and actions to

increase revenue, reduce expenditures, and improve the financial solvency of the schools are discussed. It is concluded that one-fourth to one-third of private higher education institutions experience financial difficulty, and it is recommended that Congress should require periodic review by the Secretary of Education to assess the financial condition of the institutions. A glossary, summary of selected federal programs to assist postsecondary education, the survey questionnaire, and tables on the survey are appended. ED 177 984.

Ray, Douglas. Collapsing Educational Systems. Comparisons of Policy and Administration in Teacher Education. May 1978 33p. EDRS Price MF01/PC02 Plus Postage. An appraisal of three approaches for curtailing teacher education programs is presented with a focus on the United States, Ontario, and England during the interval 1970 to 1977. The examples illustrate three theoretical approaches to planning: social demand, which is measured by student enrollments; cost benefit, which compares the costs of programs compared to the extra productivity or earnings of graduates; and manpower planning, which analyzes the market and labor force to assess needs. Research emphasizes that none of the three countries managed the collapse of teacher education programs particularly well, and opportunities for emphasizing quality through the change were missed. Final recommendations emphasize (1) diversifying educational modes in an effort to promote life-long education; (2) making adjustments systematically; and (3) retaining resources (including human resources) in the face of short-range economy measures. A bibliography is included. ED 164 445.

Schwerin, Ursula. Institutional Mission in an Era of Retrenchment. 10 Jan 1980 15p. Paper presented to the Annual Meeting of the American Association of Colleges (Phoenix, Arizona, January 10-12, 1980). EDRS Price MF01/PC01 Plus Postage. If colleges are to avoid becoming mere self-perpetuating bureaucracies, administrators should dispel the notion that retrenchment in times of fiscal constraint must necessarily compromise institutional mission. Indeed, institutional mission determines the rationale for a college's existence. Mission statements articulate goals which transcend, to a great extent, economic and demographic changes; as such, these statements should never be formulated as transient policies to be refocused in times of serious external pressures. As diminishing student enrollments and declining financial resources necessitate retrenchment policies, colleges should keep in mind that attempts at institutional survival and job-preservation tactics, such as cutbacks in high-cost programs and recruitment campaigns which promise education without study, can only diminish the ability of the college to fulfill its mission. Institutional integrity can be protected by concentrating efforts on retention, as well as recruitment, and by participating in regional educational planning to assure that necessary cutbacks do not inhibit the fulfillment of area educational needs. actions, while requiring different approaches to a college's mission, do not change that mission itself. ED 188 694.



Smin, Norman D. An Investigation of Strategies of Operation under Conditions of Reduced Funding in Select Community Colleges. Apr 1980 41p. EDRS Price MF01 Plu Pretage. PC not awailable from EDRS. This four-part report exam. management of retrenchment at six representative Souths California community colleges and two community college districts. Part I presents a review of the literature with community college responses to decreased funding i 1970s and the effects of Proposition 13 (1978) on the Carriornia community colleges. Part II, comprised of case studies based upon personal interviews with the presidents of each of the target colleges and districts, describes the management strategies used to meet the challenge of Proposition 13 and the effect of chose strategies on the quality of the colleges' educational programs. Part III provides estimates of the probable fiscal impact of Proposition 9 (an income tax reduction initiative) during 1980-81 and describes the planning activities undertaken by the target colleges and districts to meet the funding reductions that would result from the passage of Proposition 9. Part IV presents conclusions concerning the need for community colleges to implement institutional research strategin the study of retrenchment management. A

bibliography is included. ED 186 065.
Statemenson, Mike; Walleri, R. Dan. Budget Unit Analysis in an Era mi Retrenchment: The Interface between Financial Planning and Program Evaluation. AIR Forum 1980 Paper. Apr 1980 24p. Paper presented at the Annual Forum of the Association for Institutional Research (20th, Atlanta, Georgia, April 27-May 1, 1980). EDRS Price MF01/PC01 Plus Postage. The process, findings, and utility of an institution wide budget unit analysis conducted at a community college during the 1979-80 year are Financial projections were developed by applying a described. modified version of the Information Exchange Procedures Model, and evaluation data were derived from the system developed to meet the requirements of the 1976 Vocational Education Act. A composite rating was created for each program and service offered by the college. The resulting report was used by college decision makers in preparing the reduced budget. Use of the information by college administrators and the relationship between the budget analysis and the proposed reduced budget are The college needed to cut more than 35 percent from discussed. the proposed 1980-81 budget due to declining enrollment, local budget levy defeats, and inflation. ED 189 933.

Three Thousand Futures. The Next Twenty Years for Higher Education. Final Report of the Carnegie Council on Policy Studies in Higher Education. 1980 175p. Available from Jossey Bass Inc., 433 California St., San Francisco, CA 94104. EDRS Price #F01 Plus Postage; PC not available from EDRS. In this look at the near future of higher education, and in light of probable declining enrollments and resources, two perspectives are given, both drawn from existing literature. The first sets forth some of the fears of higher education professionals in one possible, if extreme, scenario; the second, some of their hopes

in another. Among the fears: enrollments will fall even faster than the size of the college-age cohort; tax policy and public policy will reduce resources available; colleges will become competitive in destructive ways; faculty will become rigidly defensive; students will, in their power as choice-makers, guide institutions to lower standards; and institutions will lose autonomy steadily. Among the hopes: college clientele will expand to other age groups; resources will decline more slowly than will enrollments; higher education will remain politically influential enough to hold its own; academic integrity will be upheld by developing codes of fair practice; the end of expansion will allow institutions to concentrate on quality; students will be intelligent consumers; and faculty will establish appropriate priorities for their efforts. These arguments are discussed in detail with supporting statistical data provided. Courses of action for institutions, states, and the federal government are examined. Appended are a list and descriptions of the Carnegie Council surveys, a glossary and guide to abbreviations, and a list of references. ED 183 076.

Woodruff, A.M. 1980-1995: The Threat to Higher Education: Special Reference to Connecticut. May 1979 102p. EDRS Price MF01/PC05 Plus Postage. Higher education in the State of Connecticut is examined in light of the problems created during a time of retrenchment. Centered on the thought that the state's educational institutions have over-expanded, this report studies the historical background and financial arrangements of Connecticut higher education and offers recommendations for dealing with current and future financial crises. The history of Connecticut institutions is traced from 1945, noting large enrollment increases and facility expansion for both the public and private sector. The various methods higher education institutions have used to borrow money are examined including: demand loans, mortgages, federal funding, state funding, and collegiate bonds. Specific problems for the state's higher education institutions include declining enrollments, competition between the independent and public schools, internal problems, inflation, and delayed retirement. Information on relative solvency of Connecticut schools and methods for handling delinquent loans are also provided. Recommendations are made for federal and institutional policies to help schools survive the coming years. ED 176 624.

Citations from Current Index to Journals in Education

Brantley, Paul S.; And Others. To Be or Not to Be--Survival Profiles of Emerging Institutions. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 pll-27 1979. Reprint: UMI. Essential requisites for managing institutions in a retrenchment economy include: a clear-cut institutional mission, effective student recruiting, adequate self-knowledge, and competent and dynamic leadership. Practical

implications of these conditions for administrators and institutional researchers are discussed. EJ 214 534.

Browder, Lesley H., Jr. Where Are Schools of Education Going? Journal of Teacher Education, v29 n4 p52-56 1978.
Reprint: UMI. Declining enrollment and changing attitudes toward higher education pose problems for schools of education and call for reorganization and broader programs offered by these institutions. EJ 189 482.

Brown, Jerry W.; Service, Allan L. Enrollment Decline and Institutional Size: Using Management Information to Ask the Right Questions. CAUSE/EFFECT, v2 n5 pl4-19, 22-25 Sep 1979. The nature and form of useful management information in a variety of situations is discussed. It is suggested that questions posed by managers may determine the effectiveness of the management information system. Questions concerning demographic trends and enrollment declines are used to illustrate this point. EJ 214 600.

Brown, Stephanie L. Approaching Faculty Productivity as a Mechanism for Retrenchment. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 p45-54 1979. Reprint: UMI. Effective use of available human resources for improving an institution's viability in a retrenchment economy is advocated, with reference to small developing institutions. The use of temporary and part-time faculty is discussed as well as faculty release time and the effects of class size. EJ 214 636.

Cazalis, Pierre. Universities in the 1980s: Managing Austerity. International Journal of Institutional Management in Higher Education, v3 nl p33-47 May 1979. Austerity management of universities over a ten-year period is examined. Some theoretical solutions likely to curb the escalation of higher education costs or to contribute to some leveling-off are discussed, and it is suggested that the need for lengthy research will postpone any real innovation in management until the 1990s. EJ 203 390.

Cherry, Charles L. Scalpels and Swords: The Surgery of Contingency Planning. Educational Record, v59 n4 p367-76 Fall 1978. Reprint: UMI. Based on observations and research on contingency planning, as well as interviews with ten college and university presidents, the author develops several steps to illustrate the retrenchment pattern now being followed or anticipated by a variety of institutions. EJ 190 817.

Cigler, Beverly A. Management by Objectives: Practice, Pitfalls, and Utility for Small Colleges. Planning for Higher Education, v7 n5 pl-7 Apr 1979. Management by objectives (MBO), a participative management process, is discussed with specific reference to helping small colleges deal with enrollment and financial decline. Recommendations for implementation of MBO and some common pitfalls to be avoided are included. EJ 201 609.

Cooke, Alfred L. A Final Comment. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 p89-94 1979. Reprint: UMI. Various approaches to planning for retrenchment in higher education are summarized.



Planning and research are viewed as crucial components in dealing with declining enrollments, maintaining quality education, and preventing unanticipated circumstances from affecting the institution in the future. EJ 214 640.

Farquhar, Robin H. Declining Enrolment: Opportunities for Universities. Education Canada, v18 n4 p34-39, 69 Win 1978. Reprint: UMI. The author puts forward a range of new approaches for coping with the teacher surplus and for using vacant college classrooms to the benefit of both colleges of education and school boards. EJ 204 109.

Fiske, Edward B. The Marketing of the Colleges. Atlantic, v244 n4 p93-98 Oct 1979. The role of marketing in higher education is discussed in light of declining student enrollment and the problems of retrenchment. It is suggested that, rather than an unconditional acceptance of the marketing approach to institutional survival, there may soon come a time when some colleges should close their doors. EJ 211 393

Flaig, Herbert. The Budgetary and Planning Options for Higher Education in a Period of Contraction. Planning for Higher Education, v8 nl p20-27 Fall 1979. The need for planing in higher education institutions is discussed in light of the financial restrictions imposed by a period of retrenchment. Planning is defined as a systematic assessment of goals and objectives based on available resources and institutional priorities. A planning model is presented and steps in the planning process are described. EJ 211 382.

Reduction: Meritocracy or Seniority? Community/Junior College Research Quarterly, v3 nl pl3-23 Oct-Dec 78. Reprint:UMI. Presents responses to a survey of faculty at three Michigan community colleges regarding their attitudes about criteria for staff reductions in terms of sex, age, length of service, academic field, and whether personnel are unionized or not. Faculty favored a staff reduction based on evaluation rather than seniority. EJ 190 948.

Gunnell, James B. Resource Allocation for Maximum Program Effectiveness. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 p55-63 1979. Reprint: UMI. Strategies are discussed for achieving maximum effectiveness in spending during times of inflation and declining enrollment coupled with inflation. A model for resource allocation is proposed and a case study presented. F1 214 677

allocation is proposed and a case study presented. EJ 214 637.

Hechinger, Fred M. Making Less Become Better. Educational Record, v61 n1 p39-42 Win 1980. Reprint: UMI. Higher education faces some difficult problems, caused by limited resources and declining enrollments, including planning for retrenchment, the competition between the private and public sectors, the protection of higher education's autonomy, and academia's role in school reform. But the end of growth can also mean a new opportunity for academic leadership. EJ 216 445.

opportunity for academic leadership. EJ 216 445.

Henderson, Lee G. State Agencies and Effects of Reduction.

New Directions for Community Colleges, v6 n2 p27-34 1978.

Reprint: UMI. Discusses the role of state agencies in assisting



community colleges to meet declining resources. Four priority areas outside the routine administrative functions are outlined: (1) information and accountability, (2) communication and advocacy, (3) funding, and (4) change agent responsibilities. EJ 189 243.

Hill, Andrew. Sources and Information for Coping with Reduced Resources. New Directions for Community Colleges, v6 n2 p95-98 1978. Reprint: UMI. Cites ERIC documents dealing with state finance and planning, federal aid, college management and planning systems, and nontraditional education and community services programs in a time of financial exigency. EJ 189 251.

Holmes, Barbara D. Designing the Mission and Role of Institutional Research under Difficult Fiscal Constraints: A Case Study. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 pl-10 1979. Reprint: UMI. The operation of the institutional research unit at Fayetteville State University is discussed. It is suggested that small institutional research offices can survive periods of financial restraint and maintain the quality of research through the use of innovative and efficient techniques. EJ 214 633.

Hore, Terry. Crisis Management. Vestes, v22 nl p20-25 1979. Some problems and solutions of "steady state" or nongrowth higher education institutions are considered, such as accountability, lack of funds, and lack of staff mobility. Possible remedies discussed are early retirement, fractional appointments, retrenchment, retraining, flexible ranking, and protected positions. EJ 208 295.

Hull, Ronald E.; Wheeler, Daniel. Retrenchment: Some Ideas for Understanding the Interpersonal Process. Planning and Changing, v8 n4 p250-6 1977. Reprint: UMI. Discusses dysfunctional and functional ways to approach administrative decisions as they relate to the hiring and dehiring of professors of education. EJ 175 623.

Kauffman, Joseph F.; And Others. Higher Education in the Eighties: A Review Symposium. Review of Higher Education, v3 n2 p1-13 Win 1980. Joseph F. Kauffman, W. Todd Furniss, and Jay L. Chronister review two recently published works that focus on important trends threatening the survival of colleges over the next decade. Fiscal, enrollment, reduction, reallocation, and retrenchment problems are discussed. EJ 219 778.

Kerr, Clark. Key Issues for Higher Education in the 1980s. New Directions for Higher Education (No. 28, Preparing for the New Decade), v7 n4 pl-11 1979. Reprint: UMI. In this look at higher education, it is predicted that short-range problems will be the challenge. Enrollment predictions, along with such other issues as quality of education, balance in higher education, integrity, dynamism of institutions, and the future of the private sector, are discussed. EJ 219 755.

Kozoll, Charles E.; Moore Donald E., Jr. <u>Professional</u>
<u>Growth vs. Fiscal Restraint</u>. Community College Frontiers, v7 n4
<u>pl8-22 Sum 1979</u>. Reprint: UMI. Keynotes the problems of
organizational and staff development programs during times of
financial scarcity. Suggests a four-phase process to unify staff

and organizational development. Offers planning and evaluation criteria to facilitate decision making and consolidate money for high impact programing. FL 224 148

high impact programing. EJ 224 148.

Leslie, Larry L. The Financial Prospects for Higher Education in the 1980s. Journal of Higher Education, v51 nl pl-17 Jan-Feb 1980. Reprint: UMI. It is contended that future prospects for higher education are brighter than many anticipate. Political inertia acts to keep public spending near previous levels, and even during "down periods" educational resources seldom decline. EJ 219 731.

Matson, Jane E. Reduction and Student Services. New Directions for Community Colleges, v6 n2 p53-60 1978. Reprint: UMI. Discusses the need for designing a system of accountability for use in decision-making about allocations of resources for student services. Programs and staff adjustments should be made in response to the changing student population. EJ 189 246.

Moore, Michael A. On Launching into Exigency Planning. Journal of Higher Education, v49 n6 p820-38 1978. Reprint: UMI. Faculty engaged in long-range planning for financial exigency, including the making of plans for faculty lay-off contingencies, must be aware of several problem areas arising from attitudes, assumptions, and intergroup relationships. Such problems and their implications are discussed, based on experiences at Bowling Green State University. EJ 189 003.

Nwagbaraocha, Joel O. Planning, Management, and Evaluation: In Search of a Viable System for College Improvement. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 p29-43 1979. Reprint: UMI. The planning, management, and evaluation system is discussed as an effective aid for academic decision makers during a period of retrenchment

for higher education institutions. EJ 214 635.

Partee-Scott, Glenda. A Multi-Institutional Approach to Providing Institutional Research Services. New Directions for Institutional Research (No. 24, Planning Rational Retrenchment), v6 n4 p79-88 1979. Reprint: UMI. Creative responses of poorer higher education institutions to demands of production under restraints of minimal resource allocation are described. It is suggested that cooperative arrangements and group efforts could help other institutions facing financial restraints. Sources for additional information are cited. EJ 214 639.

Richardson, Richard C., Jr. Community Colleges: Time to Call a Halt? AGB Reports, v21 n4 p4-8 Jul-Aug 1979. Reprint: UMI. Community college trustees face critical decisions on policy issues. Instead of a growth-oriented marketing approach, the alternative of planned decline under board management is suggested. Alternatives, response to decline, role of faculty in policy determination, and new resource allocations are discussed. EJ 208 312.

Riggs, Robert O. Life-Saving Prescriptions for Schools of Education. Phi Delta Kappan, v57 n5 p333-4 Jan 1976. Schools of education facing reduced enrollments should consider taking such steps as eliminating nonproductive programs and courses, retooling faculty, offering elective courses that appeal to



noneducation majors, planning new programs based on existing faculty and physical resources, recruiting flexible faculty, and developing cooperative programs with academic departments. EJ

Shattock, M.L. Retrenchment in U.S. Higher Education: Some Reflections on the Resilience of the U.S. and U.K. University Systems. Education Policy Bulletin, v7 n2 p149-68 Fall 1979. Reprint: UMI. Evidence relating to the decline in higher education in the United States is summarized, and comparison is made between the U.S. system and that of the United Kingdom, especially in relation to the resilience of the two systems. It period of severe fiscal restraint and declining enrollments. EJ 738.

Shaw, K. E. Management and the Environment in a College Merger. British Journal of Teacher Education, v4 n3 p239-48 Oct 1978. The managerial problems encountered in the merger of two schools of education are discussed. EJ 198 787.

Sussman, Herbert M. Institutional Responses to Reduced Resources. New Directions for Community Colleges, v6 n2 p35-43, New York City Community College and the retrenchment models which were implemented. EJ 189 244.

Wilson, James B. Financial Exigency: Examination of Recent Cases Involving Layoff of Tenured Faculty. Journal of College and University Law, v4 n3 p187-97 1977. After a review of court cases and the AAUP statement of financial exigency, it is faculty should be formulated to assure that at least minimal due process protection for the faculty is provided while permitting the institution flexibility for decision-making processes. EJ



RETRENCHMENT IN ELEMENTARY/SECONDARY EDUCATION

Citations from Resources in Education

Abramowitz, Susan. The Dilemma of Decline. Oct 1979 13p. Paper presented at the Annual Meeting of the National Association of State Boards of Education (17th, Williamsburg, Virginia, October 10-14, 1979). EDRS Price MF01/PC01 Plus Postage. This paper, one of two related documents, examines the impact of declining enrollments on educational expenditures. It highlights population and social changes that have contributed to the decline and discusses the general financing of schools. Finally, the paper discusses strategies state policymakers can use to manage decline, including forecasting enrollment trends, providing technical assistance and specialized services, altering staffing policies, and building public relations. ED 184 233.

Abramowitz, Susan. The Hidden Costs of Decline. 1980 16p. EDRS Price MF01/PC01 Plus Postage. Enrollment decline raises questions about decision-making in school systems and about kinds of solutions to problems that arise. According to this paper, one of two related documents, policy makers, educators, and community members need to be aware of the hidden costs and concerns resulting from different solutions. It addresses questions of costs in terms of sacrificing school size, equity, and quality. The paper concludes that options exist, but each option has different costs and benefits associated with it. Every community has to decide what kind of education it wants to buy and how much it is willing to pay for it. ED 184 231

buy and how much it is willing to pay for it. ED 184 231.
Atherton, Peter J. Some Theoretical Considerations Influencing Educational Finance in the 1980's. 25 Sep 1979 20p. Paper presented at the Annual Meeting of the Canadian Association of School Administrators (September 25, 1979). EDRS Price MF01/PC01 Plus Postage. The major problem to be faced in Canada in the next decade is resource allocation. Administrators must make conscious efforts to distinguish between changes in price levels that are the effect of inflationary pressures and increases in costs that are the result of changes in quality or quantity of inputs. A second area extremely important in dealing with declining resources will be the way available resources are distributed. Critical will be an understanding of the difference between average and marginal cost. Average cost measures include cost per student, cost per teacher, and cost per classroom. Marginal cost may be defined at the actual saving or cost that results from adding or subtracting one more unit to the system. When resources are allocated according to a formula based on average cost (such as amount per student) during a period of declining enrollment, fund allocation goes down more than actual marginal savings go up. Although the number of students has declined, the total cost for teacher salaries or plant maintenance remains the same. School boards must be helped to adjust to this situation through a reorganization of allocation systems to reflect true costs more accurately. ED 185 642.



Benson, Charles S., Comp.; And Others. Educational Finance and Organization: Research Perspectives for the Future. Program on Educational Policy and Organization. Jan 1980 275p. Available From the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock #017-080-02091-2; \$6.50). EDRS Price MF01/PC11 Plus Postage. The Stanford-Berkeley Seminar on School Finance and Organization was convened to reexamine problems that underlie the educational finance reform movement, to consider new problems caused by that movement, and to recommend research topics and study areas that could help alleviate those problems in years to come. The eight papers discussed and revised during the five months of the seminar and presented in full in this document (1) assess the role of the courts in the development of the educational finance reform movement; (2) consider the relationship between equity nd fiscal neutrality in the light of state actions; (3) argue that the business model for understanding school organization is inadequate and its application hazardous; (4) point out dangers in assuming larger schools and districts are more efficient; (5) examine the implications of changing fertility rates; (6) build on the literature in economics of time, time budget analysis, and child psychology to explore how a child's use of time outside school affects academic performance; (7) reject the human capital model for understanding the relationship between schooling and work; and (8) urge adoption of "recurrent education" as a technique for keeping the society economically and educationally vital. ED 188 318.

Bernhardt, Victoria L. Projecting Student Enrollments: A Basic Step in Comprehensive School District Planning for Declining Enrollment. Feb 1980 166p. EDRS Price MF01 Plus Postage. PC not available from EDRS. Implementing an enrollment projection methodology and a planning methodology in a school district is often a complex problem because many possibilities exist. The purpose of this study is to demonstrate that successful research techniques used by some school districts can inform other districts about methods and aims to pursue or avoid in enrollment projection efforts. The four case studies explained in this document describe enrollment projection methodologies presently used in four metropolitan areas that are experiencing declining enrollments and drastic population shifts. The book also describes methodologies for projecting individual school enrollment and two enrollment projection methodologies that incorporate variables other than past enrollment trends. The latter procedures -- land use adjustment and the balancing factor -- are examples from the Eugene (Oregon) school district. ED 187 020.

Bornstein, Leonard. The Politics of Enrollment Decline. 2
Dec 1978 9p. Paper presented at the Annual Meeting of the New
Jersey School Board Association (Hightstown, New Jersey, December
1978). EDRS Price MF01/PC01 Plus Postage. New Jersey's removal
of \$22 million from its 1979-80 state school aid payments
requires that school administrators immediately establish
priorities and explore options for dealing with enrollment



decline. From 1969 to 1978 New Jersey K-6 enrollment has dropped 19.4 percent. The time for selecting reasonable approaches to declining enrollment is running out. Board members and administrators can either retain all schools, facilities, and programs in spite of great costs or cut programs, staff, and schools. Since the former alternative is unrealistic, the best place to start may be to urge citizens, teachers, students, and administrators to identify criteria to use for closing programs and schools. It is difficult to deal with enrollment decline because sometimes the best solutions are not the most politically expedient. Board members must make decisions destined to make them unpopular. Districts need to develop procedures for dealing with enrollment decline in as technical a fashion as possible. Today's need is for administrators able to plan for and manage declining enrollment problems, particularly declining budgets, new curriculum needs, job attrition, and school closure. Although there are no easy answers to the problem of declining enrollment, this period is an opportune time for leaders with commitment and a sense of history. ED 165 279.

Boyer, Thomas L.; Nassau, Stephen M. Legal Aspects of Declining Enrollment. 1978 7p. Chapter 14 of School Law Update--1977 (ED 169 635); not available separately. Available from the National Organization on Legal Problems of Education, 5401 S.W. Seventh Avenue, Topeka, Kansas 66606 (\$9.95). Not available from EDRS. This paper reviews the legal aspects of declining enrollments in school districts and the resultant problems of reducing the teaching staff. It suggests that school administrators and boards of education become familiar with their state tenure statutes or have access to competent legal counsel who specialize in that area of law, make decisions to reduce staff predicated on well-reasoned estimates of enrollment and the financial position of the school district, and not overlook the

common sense approach. ED 169 649.

Brubacher, John W.; Shibles, Mark R. Organizational Implications for Research. 25 Oct 1979 20p. presented at the Annual Conference of the Northeastern Educational Research Association (October 25, 1979). EDRS Price MF01/PC01 Plus Postage. In the past, educators have based their decisions or an assumption that schools would continue to grow in enrollment and resources. Educational literature, too, has focused on developmental and growth assumptions. Such assumptions may no longer be valid, as educational organizations are being confronted by problems of retrenchment and decline. This paper reviews the literature in order to formulate hypotheses about organizational decline, raise research questions, and provide a basis for conjecture about administration in declining situations. The authors found that there is little conceptual literature about decline and that almost none can be found in educational administration journals. The paper (1) provides an historical perspective on the emergence of decline as a major force acting on public and private organizations, (2) outlines the causes of decline,



(3) notes the organizational implications of decline, and (4) suggests directions for research. ED 179 017.

Church, Mary Josephine; And Others. HIGH LONESOME: School Community Survey of the Encino Rural Independent School District. Jan 1980 103p. EDRS Price MF01/PC05 Plus Postage. An assessment of school facilities and services and a survey of staff, student, and community attitudes was undertaken at the request of the Encino School Board to aid in educational planning and improvement for its small rural school which is faced with the problems of declining population (from 400 to 150 in the past 20 years), declining enrollment (66 students in grades K-12), and rising costs. The following recommendations are based on a comprehensive assessment of facilities, services, and educational costs: (1) add a part-time principal or intern in educational administration to assist the superintendent/principal; (2) develop a variety of inservice teacher training programs; (3) use the PLATO system to increase the number of courses available and further individualize instruction; and (4) finance capital outlays to reduce the building area and modernize classrooms. Survey results indicate that faculty, students, and community members are concerned with the quality of local education but have positive attitudes about their school and want it to remain in operation. In addition to specific educational improvements, it is suggested that the community of Encino might consider plans to counteract the pervasive effects of declining population. The development of tourist related business is one of several possible ways to bring new residents as well as income to the Appendices include the survey questionnaires and bibliography. ED 188 797.

Corman, Linda, Comp. Declining Enrolments--Issues and Responses. An Annotated Bibliography. Current Bibliography No. Mar 1979 82p. Available from Publication Sales, The Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Ontario, Canada M5S 1V6 (\$4.75). Not available from This annotated bibliography reflects an attempt to EDRS. indicate the range and quality of published responses to the complex prenomenon of declining enrollments in elementary and secondary schools. It is intended to suggest sources of practical information and advice and to provide a larger context for administrators coping with the effects of decline in their own school systems. Works that confront the issues and problems comprehensively are cited in the first two parts of the hibliography. The subsequent seven parts contain works that stress a single facet of the problem, such as enrollment forecasting, school closing criteria, site redevelopment, or financial reform. Most of these will not be rigidly confined to the topic under which they are listed, but their placement reflects their principal strength or emphasis. Probably the strongest and most sophisticated segment of this literature is in the field of demographic analysis. Not far behind in quantity and quality is the literature on school closure and reduction in force, and on the positive alternatives to these measures, such as innovative uses for surplus space, program expansion and



diversification, and employment benefits for teachers that maximize the number of available teaching positions. ED 172 344.

The Declining Enrollment Project. An Anthology of New Jersey State Department of Education Research on Declining Enrollments. Sep 1978 66p. EDRS Price MF01/PC03 Plus Postage. This anthology of articles investigates and analyzes problems related to declining enrollment with emphasis on the state of New Jersey. It is intended to provide assistance to local New Jersey school districts in managing and preparing for enrollment The first chapter provides an overview of declining enrollment in New Jersey and touches on its effects on finance, personnel, facilities, and management. The second chapter explores patterns of enrollment fluctuation in New Jersey school districts from 1966-67 to 1976-77, concluding that enrollment decline has hit some areas of the state and some types of districts more severely than others. The third chapter outlines the policy options open to the states in responding to decline and reviews the changes in state-aid formulas that 19 states have made as a result of decline. In chapter four, some ways of dealing with surplus facilities produced by declining enrollment are briefly reviewed. ED 184 219.

Declining Enrollments. 1979 5p. Chapter 10 of The Best of the Best of ERIC. Not available separately. Parent document number ED 163 620, available from the ERIC Clearinghouse on Educational Management, University of Oregon, Eugene, Oregon 97403 (\$6.50 prepaid). EDRS Price MF01/PC05 Plus Postage. This chapter of The Best of the Best of ERIC, vol. 2, contains 15 summaries of documents and journal articles on declining enrollments, all of which are indexed in either Resources in Education or Current Index to Journals in Education. The materials included deal with various aspects of this topic, such as optional use of surplus school space, the do's and don'ts of closing a school, an analysis of the characteristics and reliability of various enrollment forecasting techniques, and the management implications of declining enrollments. ED 163 630.

Dembowski, Frederick L. The Effects of Declining Enrollments on the Instructional Programs of Public Elementary and Secondary Schools. Apr 1980 24p. Paper presented at the Annual Meeting of the American Educational Research Association (Boston, Massachusetts, April 7-11, 1980). EDRS Price MF01/PC01 Plus Postage. Using a nationwide survey of 95 school districts, this study attempted to assess the patterns and effects of declining enrollment. The survey examined the current effects of declining enrollment on instructional and supervisory programs. Utilizing a random sample of school districts stratified by size of district in 1977, region, and percent of school population change from 1970 to 1977, the author sent questionnaires to school superintendents in districts across the United States. Results indicated definite differences between schools with decreasing and increasing enrollments. Districts with declining enrollment showed less decrease in dropout rates. They also had older teachers, and more early retirement programs, and required teachers to be able to teach in more subject areas. The effects

of declining enrollment related to instructional issues included increased use of alternative education and computer assisted instruction methods, a shortened materials replacement cycle, and changes in the quality of the program. Staffing, course offerings, courses taught, and facility space allocated were decreased more in academic than in vocational curriculum areas. ED 184 208.

Fowler, Delbert H. Declining Enrollments: Staffing for the Eighties. Feb 1979 7p. Paper presented at the Annual Meeting of the National Association of Secondary School Principals (63rd, Houston, Texas, February 2-6, 1979). EDRS Price MF01/PC01 Plus Postage. School districts that survive declining enrollments will be the ones who recognize that the problem exists and build their programs and plans to meet the problem. It is necessary to know community demography and develop farsighted, actuarily sound projections of the effects. As money is basic to the problem, it is necessary to know the fiscal characteristics of a particular decline and the possible resources that are available. In regard to staffing, administrators will have to become experts in labor management. Tenure and reduction in force policies will have to be negotiated. District incentives and early retirement may have to be re-evaluated and changed to meet changed circumstances. However, declining enrollments can be a new motivating force that will provide opportunities in education. With foresight, planning, and imagination, schools will benefit by new thinking and creative leadership to meet the demands of the times. ED 172 429.

Solutions. AASA Critical Issues Report. 1980 80p. Available from the American Association of School Administrators, 1801 North Moore St., Arlington, VA 22209 (Stock #021-00333; \$9.95 prepaid). EDRS Price MF01 Plus Postage. PC not available from EDRS. This guide discusses the results of a national survey of school administrators who were asked to rank from a list of 13 problems the top problems facing their schools today. Their responses include how to cut costs in areas such as salaries, fringe benefits, and energy; how to better manage their schools and set priorities; and how to maintain quality and effectiveness. Included are various case studies and step-by-step procedures for reducing school costs. ED 182 869.

Hess, Fritz; And Others. Declining Enrollments: National Problem--Local Response. Jan 1979 50p. EDRS Price MF01/PC02 Plus Postage. American schools, after two decades of expansion, are now in the midst of an enrollment decline and inflation. The impact of the shift from growth to retrenchment and streamlining has been severe. An effective approach to this situation requires an understanding of the new conditions and of available alternatives for action. An overview of changes in the educational system demands a thoroughgoing investigation of situations that exist at the national, state, and community levels. The present study treats both national and local aspects of the situation. Data concerning the demographic dimensions of eenrollment decline are examined. This is followed by a



treatment of the impact of decreased enrollment on various aspects of public education including students, community members, school personnel, and the physical and economic dimensions. Since the pattern of declining enrollment in many cases points to reallocation of space and closing of structures, responses to decline must come to grips with the human aspects of this process. One system in which reorganization has met with notable success is the East Syracuse-Minoa district of upstate New York. The planning that preceded reorganization and the reorganization process itself are explained in detail. ED 172 398.

Hickcox, Edward S.; Ryan, Doris W. The Politics of Educational Decline: Issues in Governance and Administration. Apr 1979 24p. Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, California, April 8-12, 1979). EDRS Price MF01/PC01 Plus Postage. Enrollment decline places new pressures on school administrators and school boards, but Ontario's Commission on Declining Enrollments found no call for a complete reorganization of either the provincial governance system or the structure of the delivery system at the administrative level. This document describes those aspects of Ontario's school system that affect its response to enrollment decline, and cites both constraints faced by school boards facing decline (demographic factors, community and school employee reactions to school closure, and financial factors) and alternative techniques for coping with decline (staff reduction, reassignment, or reorganization; school board restructuring; and allocation of surplus space). Areas listed as requiring attention at the provincial government level include support for minimal programs, long-range financial costs, improvement in provincial-local relationships, and in general the assumption of a leadership role in education. Information on specific local situations was gathered in a survey of T1 of Ontario's 194 school boards. ED 170 921.

Kelly, Edgar A., Ed. Reduction in Force: Policies, Practices, and Implications for Education. Briefings in Educational Issues, Number 1. Nov 1978. 85p. EDRS Price MF01 Plus Postage. PC not available from EDRS. The seven chapters in this document provide an introduction to the problems of reduction in force (RIF), an overview of school enrollment trends in the United States and Nebraska, an historical view of RIF, the attitudes of various professional associations toward RIF, selected policies and procedures established by various states and school districts, considerations in the development of RIF policies, and the implications of RIF for educational planning. ED 166 813.

Keough, William F., Jr. <u>Declining Enrollments: A New Dilemma for Educators. Fastback 116</u>. 1978 45p. Available from Phi Delta Kappa, Eighth and Union, Box 789, Bloomington, Indiana 47401 (\$.75). EDRS Price MF01 Plus Postage. PC not available from EDRS. Twenty years after the baby boom, U.S. population is falling and school enrollment is declining. Contrary to public expectations, smaller enrollment does not mean smaller school



budgets, and balancing the educational budget will require cutting programs, closing schools, and reducing teacher staffing levels. The experience of the East Meadow (New York) school district, whose residents refused both to close underfilled schools and to approve the budget needed to operate these schools, illustrates the fact that education is no longer a high national priority. Enrollment decline is creating the need for every district to develop a reduction in force policy. Eliminating programs and closing schools will require careful setting of criteria. Creative ways for dealing with enrollment decline, such as space sharing, regrouping of students, early teacher retirement plans, and teacher leaves of absence, while not able to radically change the course of events, might modify The gravest danger to administrators in dealing their impact. with declining enrollment lies in applying a short-term solution in lieu of long-range planning. It is necessary to have a master plan that incorporates opportunities for community, faculty, and administrator input. Although there are no ways to make education again a high national priority, this report offers suggestions for preparing for and modifying the impact of its decline. ED 165 301.

Kirst, Michael W.; Garms, Walter I. The Demographic, Fiscal, and Political Environment of Public School Finance in the 1980's. Policy Paper No. 80-Cl. March 1980 45p. Paper presented at the Annual Meeting of the American Education Finance Association (San Diego, California, March 16-18, 1980). EDRS Price MF01 Plus Postage. PC not available from EDRS. This paper explores the future of school finance through an examination of the size and distribution of future populations, the future of the economy and its effect on money available for schools, and the political context within which decisions will be made. projects this knowledge over the decade of the 1980s and makes future predictions about the financial outlook for education. Some of the specific topics explored include enrollment projections, the impact of demographic changes, the impending shortage of quality teachers, societal forces competing with education for funds, and political strategies to increase expenditures for education. ED 188 281.

Knapp, Herbert; Jones, Richard M. National Report on School Closing Survey. The Impact on Purchasing Departments.
1979 29p. Paper presented at the Annual Meeting of the Association of School Business Officials (65th, Denver, Colorado, October 14-18, 1979). EDRS Price MF01/PC02 Plus Postage. This paper is a brief report on the impact of school closings on purchasing departments. It opens with a discussion of the trend of declining enrollments in public schools nationwide. The paper notes, however, that demographers expect the total number of children to begin to rise slightly in the mid-80s. Closing schools now is not the answer, it says, but joint use of vacant school buildings may be an acceptable alternative. The paper says school purchasing departments are in a dilemma when funds are short to buy new furniture while at the same time school districts need to dispose of old, unused furniture and equipment.

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It points out the need to reduce budget spending and to learn to operate the schools more efficiently. Disposing of property is

only one of the ways. ED 177 688.

Kudlaty, Frank. Reduction in Force: Is Your Board Prepared? Apr 1980 12p. Paper presented at the Annual Meeting of the National School Boards Association (40th, San Francisco, California, April 19-22, 1980). EDRS Price MF01/PC01 Plus Postage. One of the conditions set forth in the hiring of the new superintendent of a southeast Texas school district was that a reduction in force would be accomplished. How this process, usually involving six months planning time and an additional year to carry out, was accomplished in a period of six months is detailed in this speech. An analysis of the reduction in force program reveals that its strengths were planning, involvement of principals, support of the school board, support of the media, and the superintendent's ability to be less than popular and take the heat in his first year in the district. Program weaknesses were identified as the failure to identify maximum class size early in the discussion, failure to involve the teacher association earlier in the planning stages, the fact that the district waited until the situation was of such a magnitude that drastic action was necessary, and referring to employees as "excess" or "surplus." ED 188 292.

Mastoraki, Frank. Reduction in Force, Bridgeton Public Options, Opportunities and Fiscal Impacts of Declining
Options, Opportunities and Fiscal Impacts of Declining
Options, Opportunities and Fiscal Impacts of Declining Schools. Enrollment. 15 Aug 1978 17p. EDRS Price MF01 Plus Postage. Ponot available from EDRS. This paper describes the reduction in force (RIF) that took place in the Bridgeton Public Schools, New Jersey, as a result of its exclusion from the formation of a new regional school district. During the school year 1976-77, enrollment declined by 1,600 pupils, tuition diminished by \$2,000,000, and staff had to be reduced by 89 employees. The RIF procedure involved reevaluating and reducing program and class sizes and then beginning the task of deleting positions. the steps taken, which are offered as suggestions to school districts elsewhere, included meeting with the teachers' organization to enlist support, formulating a seniority list, and keeping staff, students, and community informed of developments. The paper concludes that understanding and managing the results of declining enrollments can make the difference between survival and death of a school system and ultimately a community. Also, the process of dismissing individuals should be conducted in a humanitarian way. Included are steps to follow in a RIF, a sample policy; observations on personnel, programs, facilities, and budgets; and a bibliography of references used. ED 172 418.

Nassau, Stephen M. Collectively Bargained Approaches to Declining School Enrollment. 1978 10p. Chapter 15 of School Law Update--1977 (ED 169 635); not available separately. Available from the Natonal Organization on Legal Problems of Education, 5401 S.W. Seventh Avenue, Topeka, Kansas 66606 (\$9.95). Not available from EDRS. This paper discusses how the inevitable upheavals caused by economic difficulties surrounding declining enrollments can be lessened by dealing with the subject in the



collective bargaining arena. Through joint participation in the negotiations process, school administrators and teachers can reduce tensions associated with the right of an employer to lay off employees and can come to an agreement on giving notice before layoffs and selection of those to be laid off. This paper also deals with affirmative action considerations and alternatives to layoffs. ED 169 650.

Needs of Elementary and Secondary Education in the 1980's. A Compendium of Policy Papers. Committee Print. 96th Congress, 2nd Session. Jan 1980. 704p. EDRS Price MF04 Plus Postage. P not available from EDRS. This publication is a collection of articles by various authors on educational trends during the The diverse collection of writers offers background information for future decisions about legislation and educational policy. In the category of leadership and governance, most of the papers are oriented toward single issue interests, the general fragmentation of leadership at all levels, and the challenge to leaders in the current era of change and The major points from the social change and demographics papers relate to the manner in which changing societal values and changes in the age distribution of the population are affecting the schools. Finally, the papers on knowledge, technology, and curriculum emphasize the potential for change in the content and delivery of instruction and the benefits that could accrue through the application of research findings in curriculum design and school operation. A continuing theme among the papers is the emphasis placed on the many ways in which change is taking place in American society and the difficulties that citizens confront in efforts to cope with change. ED 185 660.

Neill, Shirley Boes; Custis, Jerry. Staff Dismissal: Problems and Solutions. AASA Critical Issues Report. Available from the American Association of School Administrators, 1801 N. Moore St., Arlington Virginia 22209 (Stock #021-00512, \$8.95). EDRS Price MF01 Plus Postage. PC not available from EDRS. report, addressed to administrators and board members, discusses teacher dismissals in light of such factors as declining enrollment, teacher supply and demand, and budget problems. Divided into nine chapters, this how-to-do-it book discusses the following topics: facts and figures on the dismissal of teachers, alternatives to dismissal, evaluation systems, the legal safeguards of due process, building a dismissal case, examples of 12 dismissal cases, factors influencing reduction in force (RIF), examples of four types of RIF systems, and practical advice from experts in the field. Charts and checklists are scattered throughout to aid the user in implementing a workable RIF policy. ED 172 417.

Randall, James M. Staffing During a Period of Decline. 15 Feb 1979 26p. Paper presented at the Annual Meeting of the American Association of School Administrators (New Orleans, Louisiana, February 14-17, 1979). EDRS Price MF01/PC02 Plus Postage. The key to successful management of staffing during decline, this paper says, is advance planning. It suggests several steps to take in analyzing, prioritizing, economizing,



and publicizing before reduction in force hits the school. Administrators should make projections and predictions on enrollments, revenues and expenditures, facilities and staff; establish their district's goals and priorities; evaluate the program; publicize all of this, clear up contract language; and revise personnel policies and practices not in the contract to eliminate restrictive provisions. The paper also suggests that administrators develop guidelines consistent with statutory and case law and with the provisions of union contracts. Other issues discussed include keeping state legislative and executive leaders informed, retaining a capable management staff, and

developing an early retirement incentive. ED 173 925.

Reduction in Force. 1979 5p. Chapter 16 of The Best of the Not available separately. Parent document number ED 163 620, available from the ERIC Clearinghouse on Educational Management, University of Oregon, Eugene, Oregon 97403 (\$6.30 prepaid). EDRS Price MF01/PC05 Plus Postage. This chapter of The Best of the Best of ERIC contains 14 summaries of documents and journal articles on reduction in force, all of which are indexed in either Resources in Education or Current Index to Journals in Education. The materials included deal with various aspects of this topic, such as the impact of declining enrollments on personnel policies, particularly from the administrator's perspective; legal aspects of reduction in force; reduction in force as an important issue in collective bargaining; reduction in force and affirmative action; policies and procedures for implementing reduction in force plans, and encouraging early retirement as one solution to staff reductions. ED 163 636.

Reduction-in-Force: Working Policies and Procedures. May 1978 64p. Available from the National Association of Secondary School Principals, 1904 Association Drive, Reston, Virginia 22091 (\$5.00). EDRS Price MF01 Plus Postage. PC not available from EDRS. The reduction-in-force (RIF) policies presented here are intended to represent a variety of approaches currently being used throughout the nation. They were obtained through inquiries to personnel in more than 100 U.S. school districts and are presented to give principals and assistant principals information to allow them to play an instrumental part in the development of appropriate RIF policies. The publication includes eight examples of administrator RIF policies, seven examples of RIF policies applicable to both teachers and administrators, and five examples of teacher RIF policies. ED 175 088.

Rural Education Study Committee: Iowa Association of School Boards, 1976-78 Report. 16 Nov 1978 37p. EDRS Price MF01/PC02 Plus Postage. Alternatives for coping with problems related to declining enrollment in rural school districts were explored in a study undertaken in 1976 by a special committee appointed by the Iowa Association of School Boards. Over a two year period the 18 member committee examined enrollment, finance, curriculum, facilities, faculty, mergers, and other appropriate matters. In four two-day meetings the group heard from a wide variety of witnesses, including state legislators, school administrators,



university experts, school board members, and state officials. number of strengths as well as hazards were identified. districts (below 800 enrollment) offered certain advantages, including more opportunity to participate in a variety of activities, more chance to develop leadership skills, stronger community involvement, a higher level of teacher satisfaction, test scores equal or better to students in larger districts, and more stability in graduates in terms of further education and employment. Merging of small districts may provide a "grace period" from the problems of declining enrollment but will not eliminate them. Problems will intensify for small districts and long range planning should be undertaken for every small district. The present headcount system of funding should be modified to compensate fixed costs which persist even as enrollment declines. This document summarizes the proceedings at each of the meetings, lists resource material and contents, and gives the conclusions and recommendations formulated by the committee. ED 168 781.

Seifert, Edward H. Declining Enrollments and New Staffing Patterns for the Eighties. 2 Feb 1979 13p. Paper presented at the Annual Meeting of the National Association of Secondary School Principals (63rd, Houston, Texas, February 2-6, 1979). EDRS Price MF01 Plus Postage. PC not available from EDRS. enrollments continue to decline, principals face new staffing problems, especially problems connected with reduction in force. One forecasting method useful for determining if enrollment will decline is the Keough Indicator Survey Scale, which contains questions about key community characteristics. Administrators experiencing declining enrollments who use a reduction in force policy based on seniority will face problems such as increasing teacher salaries and age. As an alternative to a seniority-based policy, administrators might employ such criteria as quality of service, experience in a specific area, district need, preparation, and certification. A point system might be used that rewarded degrees, superior evaluations, and coaching or activity sponsoring experience. Other alternatives that can help solve reduction in force problems include staffing to fit midyear projections instead of fall enrollments, an early retirement system, terminating unsatisfactory teachers, cooperating with neighboring school districts, and retraining faculty for available vacancies. Negative results of reduction in force may include public outcry, large class sizes, and a decline of morale. Perhaps the most important aspect of the principal's responsibilities in dealing with declining enrollment is sensitivity to human needs. ED 172 406.

Skiera, Lou, Ed. Declining Enrollment; Community Options and Actions. 1 Mar 1978 16p. EDRS Price MF01/PC01 Plus Postage. This paper suggests that school systems can develop and implement a plan to keep schools operating to the advantage of students, staff, and community despite declining enrollment. In arguing against the closing of schools, this paper provides quotes from a survey and summary statements from school officials to show that closings do not save school districts money and that school



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closings have a negative impact on surrounding neighborhoods. Summaries of case studies illustrating ways in which school districts have coped with closings are also provided, including a "grandparent in the classroom" program, year-round education, parental involvement, community and/or adult education, and the use of school buildings for non-school activities. ED 171 856.

Stanley, William L., Jr. Reduction in Force: Is Your Board Prepared? 22 Apr 1979 22p. Paper presented at the Annual Meeting of the National School Boards Association (39th, Miami Beach, Florida, April 21-24, 1979). EDRS Price MF01/PC01 Plus Postage. This paper discusses the effects of a reduction in force (RIF) on an urban school system and offers suggestions to school administrators on moves to make and pitfalls to avoid when faced with RIF. Topics covered include legal ramifications, due process, teacher tenure, and the role of school boards and administrators. The paper suggests that school boards (1) initiate a RIF policy before it's needed, (2) cut expenses to the bone, (3) clarify the board's position to staff and community, (4) use the news media to publicize policy and administrative regulations, and (5) indicate that alternatives continue to be sought. Also listed are six pitfalls to avoid and 17 ways to reduce the financial trauma of staff cuts. ED 173 920.

Stefonek, Tom. Effective Management in Contracting Public Organizations. Aug 1979 35p. Information Series; v7 n3 Aug 1979, Wisconsin State Dept. of Public Instruction, Madison. Div. for Management and Planning Services. EDRS Price MF01 Plus Postage; PC not available from EDRS. The first half of this paper reviews school enrollment trends in the state of Wisconsin and discusses the implications of school closings. It offers planning suggestions to local districts in light of statewide declining enrollments. The second half of the paper -- a review of recent literature related to "cutback management" -- is presented to assist local personnel in understanding how organizations react to diminishing populations. Some of the areas explored include organizational decline and resource scarcity, organizational responses to municipal budget decreases, the closing of government facilities, public policy and program termination, cutbacks in the private university, and strategies for reduction in force. ED 185 646.

Surplus School Space--The Problem and the Possibilities.

1978 77p. Available from the Council of Educational Facility
Planners, International, 29 West Woodruff Avenue, Columbus, Ohio
43210 (\$3.50). EDRS Price MF01 Plus Postage. PC not available
from EDRS. This publication attempts to simplify the complex
issue of declining enrollment and surplus school space. Part one
is devoted to a thorough discussion of enrollment decline. Text
and tables are used to explain enrollment projections, large city
public school enrollment decline, birthrates, population
mobility, expenditures for education, and the number of defeated
school bond elections. Expectations and assumptions about
schools and how these will be affected by societal changes are
discussed. Part two discusses some of the factors inhibiting new
uses for school facilities and offers suggestions for using



school space that do not conflict, or conflict very little, with the current definition of "normal" education. This is followed by exploring alternative definitions of "normal" education and the use of facilities for alternative forms of schooling, retraining people for mid-life career changes, lifelong learning centers, and industrial training programs. Six sketches illustrate the proposed conversion of Niles East High School in Skokie, Illinois, to create 125 apartments, a community art center, and a community recreation center. ED 163 595.

Using Surplus School Space for Community School Centers. #5 in a Series of 6 Booklets. 1979 32p. Available from: Educational Facilities Laboratories, 850 Third Avenue, New York, New York 10022 (\$1.50). EDRS Price MF01 Plus Postage. PC not available from EDRS. This booklet is the fifth in a series that examines community school centers. Because of declining school enrollments, many school districts must now cope with staff reductions, fiscal constraints, and excess space in school buildings. Although the school population is declining, the overall population in most communities is not. Rather, the population mix is changing and other kinds of services are The need to house new and expanded services and the need to find alternative uses for surplus space are complementary. This booklet explores the opportunities for reusing surplus school space as community service centers, and the issues and constraints in planning such use. ED 168 190.

Wachtel, Betsy; Powers, Brian. Rising Above Decline. Aug 1979 200p. Available from the Institute for Responsive Educaton, 704 Commonwealth Avenue, Boston, MA 02215 (\$4.50). EDRS Price MF01 Plus Postage. PC not available from EDRS. This volume attempts to document ways in which several communities have dealt with the problems of declining school enrollments. Each case study outlines some type of public participation in the task of adjusting to population changes and fiscal pressures. The first chapter supplies an introductory overview of issues related to declining enrollment and school closures. The second chapter describes consolidation of rural school districts and explains the concerns of the citizens who resist it. Chapter three chronicles the crises arising from twenty years of shrinking enrollment in Salt Lake City. Chapter four records the resistance of Skokie, Illinois, residents to the closing of a Three different stories of school closure in California's Bay Area are told in chapter five. The sixth chapter concerns declining enrollment in Lexington, Massachusetts, an "educational boom town." Chapter seven describes how politics and parent participation intertwined with desegregation issues in Boston. The final chapter offers a plan of action urging citizens to become involved in solving the problems of declining enrollment and shrinking resources. ED 180 082.

Wendel, Frederick C., Ed. Maintaining Quality Education in the Face of Declining Resources. Briefings in Educational Issues Number 2. Mar 1979 141p. EDRS Price MF01/PC06 Plus Postage. Focusing on the conditions brought about by declining enrollment



and resources, this book presents problems and suggests ways to deal with them. Chapter one lists social forces with long-term implications for maintenance of quality education. The second chapter applies the concept "smaller is better" to education. Several planning models and strategies for determining alternative solutions make up the third chapter. A rational model for reviewing curriculum offerings and programs is presented in chapter four. In chapter five, critical issues related to student activity programs are reviewed. The next chapter presents practical techniques for reducing costs through budget review. A brief summary of an earlier publication on the policies and procedures for dealing with reduction in force (RIF) is given in chapter seven. Chapter eight explores programming, staffing, and other issues related to special education. The last chapter, aimed at school board members and administrators, presents the implications of declining enrollments, school closings, reorganization, and consolidation. The main thesis of the report is that school leaders can maintain quality education only if they utilize extensive planning, community involvement, priority setting, close examination of expenditures, and sound management practices. An extensive annotated bibliography from an ERIC search is included. ED 176 366.

Citations from Current Index to Journals in Education

Bender, Robert H. Before You Make a Reduction in Force, Be Sure to Pass a Policy that Contains These Elements. American School Board Journal, v167 n3 p38-39 Mar 1980. Reprint: UMI. Based on a survey of reduction-in-force (RIF) policies in effect in Virginia, a checklist of elements that a school board policy on RIF should include is presented. EJ 217 727.

Bishop, Lloyd. Dealing with Declining School Enrollments. Education and Urban Society, v11 n3 p185-95 May 1979. Reprint: UMI. This article discusses some of the social/political issues that are raised in relation to declining school enrollment and school consolidation. Alternatives to the closing of schools in the face of declining enrollment are discussed. EJ 205 997.

Briault, Eric. The Politics of Primary Contraction. Education 3-13, v7 nl p8-13 Spr 1979. This article looks at the educational implications of the declining birth rate in England and Wales. It outlines the major issues which arise (school reorganizations, pupil/teacher ratios, teacher redeployment, and grade organization), considers the factors affecting these issues, and examines the sources of decision-making power on each. EJ 215 456.

Brown, Oliver. Pages and Pages on How to Cut School Costs--Wisely. American School Board Journal, v165 n10 p32-36 1978. Reprint: UMI. Outlines five steps to follow in examining ways to make short-term cuts, three steps to take in making long-range plans, and several types of analyses that can be used in making reports. EJ 188 686.



Connelly, F. Michael; Enns, Robin J. The Shrinking Curriculum: Principles, Problems, and Solutions. Curriculum Inquiry, v9 n4 p277-304 Win 1979. Reprint: UMI. Basing their remarks on the final report of the Curriculum Task Force of the Commission on Declining Enrollments in Ontaro (CODE), the authors present projections of enrollment decline on Ontario's curriculum policy and summarize a number of the task force recommendations to the Ontario government. EJ 216 030.

Coulton, David; Frelich, Alan. Enrollment Decline and School Closings in a Large City. Education and Urban Society, vll n3 p396-417 May 1979. Reprint: UMI. This article discusses how available models for describing the school-closing process are not applicable to large cities. Determinants of the school-closing process in St. Louis, Missouri, are analyzed. EJ 205 702.

Cuban, Larry. Shrinking Enrollment and Consolidation:
Political and Organizational Impacts in Arlington, Virginia
1973-1978. Education and Urban Society, v11 n3 p367-95 May 1979.
Reprint: UMI. This paper describes and analyzes the political and organizational effects of school consolidation in Arlington.
Existing research on consolidation is criticized and new directions for inquiry are suggested. EJ 205 701.

Custis, Jerry. Staff Cuts: Maybe They're Inevitable But They Don't Have to be Bloody. Updating School Board Policies, v9 n3 pl-4 1978. Points out the need for a board policy on reduction in force and explains four basic policy questions to be addressed in creating such a policy and six traps to be avoided. EJ 175 694.

Divoky, Diane. Burden of the Seventies: The Management of Decline. Phi Delta Kappan, v61 n2 p87-91 Oct 1979. Reprint: UMI. Reviews what school districts are doing to cope with reduced enrollments and increased costs. Areas covered include shared facilities, reduction in force, and school closing. EJ 208 022.

Duignan, Patrick; Ponder, Arthur. Staffing Practices in a Time of Declining Enrolments. Canadian Administrator, v18 nl p1-6 Oct 1978. Explores some possibilities to help maintain staff strengths and the integrity of existing programs. Also proposes a number of criteria that may be combined into a Staff Reduction Index, which could be useful in developing more rational staffing policies. EJ 190 415.

Duke, Daniel I.; Meckel, Adrienne M. The Slow Death of a Public High School. Phi Delta Kappan, v61 n10 p674-77 Jun 1980. Reprint: UMI. Funding cutbacks affecting San Jose (California) High School have severely reduced the school personnel adequately prepared for educating in the inner city. Concentration on legally required basics has forced elimination of classes and programs appealing to student interests and needs, leading to disciplinary and attendance problems. EJ 225 460.

Eisenberger, Katherine E. How to Learn to Manage Decline in Your School System. American School Board Journal, v165 n7 p36-38 1978. Reprint: UMI. Three fundamental skills seem essential for board members in times of declining



enrollment--decision-making, long-range planning, and marshalling support for the implementation of the long-range plan. EJ 183 255.

Hickcox, Edward S.; Ryan, Doris W. Governance and Administration in a Period of Declining Enrollments. Curriculum Inquiry, v9 n4 p305-20 Win 1979. Reprint: UMI. Discusses organizational issues under the constraints of enrollment decline, focusing particularly on the politics of local autonomy and responsiveness to community attitudes regarding program modifications and school closing. EJ 216 031.

Iannaccone, Laurence. The Management of Decline:
Implications for Our Knowledge in the Politics of Education.
Education and Urban Society, vll n3 p418-30 May 1979. Reprint:
UMI. This article states that the understanding of the process of making school-closing decisions involves the consideration of both efficiency and political factors. EJ 205 703.

Jagger, T.F.B. Falling Rolls in the Secondary School. Forum for the Discussion of New Trends in Education, v21 n2 p58-61 Spr 1979. The author outlines five major problem areas in declining secondary enrollments: space accommodation, curriculum, administration, staff employment, and school reorganization. He suggests ways to turn these problems into opportunities for educational improvement. EJ 215 419.

Johnson, Susan Moore. Performance-Based Staff Layoffs in the Public Schools: Implementation and Outcomes. Harvard Educational Review, v50 n2 p214-33, May 1980. Reprint: UMI. In response to declining enrollments, some local school districts are using performance criteria to determine the order of teacher layoffs. The difficulties of implementing this practice are illustrated by the experiences of four Massachusetts school districts. Interviews with principals reveal the adverse impact upon teacher-principal relations and upon students. EJ 227 124.

Kalvelage, Joan; and Others. Reductions in Force and Affirmative Action. Educational Economics, v3 n1 pl2-14, 23 1978. By allowing permanent, part-time work and by creating positions for job sharers, school districts can redistribute available positions among current employees without reducing their numbers. Available from: Capla Associates, 18 Overlook Avenue, Rochelle Park, New Jersey 07662. EJ 173 555

Avenue, Rochelle Park, New Jersey 07662. EJ 173 555.

Mansergh, Gerald; Michael, Marian. "Job Change Services for Educators: A Positive Approach to Career Alternatives".

Catalyst for Change, v8 n3 p20-23 Spr 1979. Reprint: UMI. A pilot program to help teachers, counselors, and administrators make career transitions from education to other fields of endeavor is operating in Minnesota. EJ 201 281.

Mazzoni, Tim L.; Mueller, Van D. School District Planning for Enrollment Decline: The Minnesota Approach. Phi Delta Kappan, v61 n6 p406-10 Feb 1980. Reprint: UMI. Emphasizes the development of an effective planning capability in the state. Describes the policy challenges posed by enrollment decline, then analyzes the content and process of Minnesota's response, focusing on legislative enactments aimed at improving school district planning. EJ 215 961.



Moore, Samuel A., II. The Last Shall Be the First and the First Shall Be the Last. Peabody Journal of Education, v55 n4 p329-31 Jul 1978. Reprint: UMI. Some possible permutations of the seniority system are examined in this article in an attempt to disclose better strategies for teacher retrenchment without eroding the quality of education. EJ 195 450.

Morison, Sidney H. A Matter of Survival. National Elementary Principal, v59 n3 p66-70 Mar 1980. Reprint: UMI. The principal of P.S. 84 in New York City recounts how his school has, with the aid of parents, managed to change and to implement open education while suffering from staff cuts and other consequences of reduced funding. EJ 219 623.

One Hundred Ways to Cut Costs in Your School System.

American School Board Journal, v165 n10 p37-45 1978. Reprint:

UMI. Provides information on what to do to cut costs, how it works, how you'll save, and the consequences of the cuts. The information is given for five areas--the instructional program, facilities and operations, the central office, food service, and the computer operation. FI 188 687

the computer operation. EJ 188 687.

Pasnik, Marion. Are You Prepared for Declining Enrollments?

American School and University, v51 n6 p65 Mar 1979. Lists the items that should be included in a school building inventory and discusses techniques for marketing once the decision to close a building has been made. EJ 197 975.

Recycling the Schoolhouse--Options and Opportunities.

Journal of Educational Communication, v2 n3 p26-31 1977. A guide for educators and citizens seeking alternative uses of vacant facilities. Discusses local, legal, economic, and social issues involved, as well as alternative facility uses, including human service centers, use by other government agencies, and conversion to housing, private schools, colleges, and adult education facilities. EJ 175 710.

Ringers, Joseph, Jr. Managing Underutilized Facilities During a Period of Declining Pupil Enrollment--A Descriptive Study of Arlington, Virginia. CEFP Journal, v18 n1 p14 Jan-Feb 1980. Reprint: UMI. An abstract of a study to discover the political interaction leading to policy decisions for the management of underutilized school facilities, to determine the actual policies that resulted from those activities, and to investigate the satisfaction level of participants. EJ 221 555.

Rosenzweig, Pat. Marketing Surplus Schools. School Business Affairs, v45 n6 p8, 12-13 Jun 1979. Reprint: UMI. A survey of approximately 80 closed schools reveals the cause of closing the school, the new user's form of ownership, and the type of reuse. School districts should recognize the steps required to define a market in an attractive and financially feasible form. EJ 204 768.

Thompson, Brenda. Amalgamation. Education 3-13, v7 n2 p13-17 Win 1979. The author points out two of the problems involved in merging two schools: first, determining which buildings to close and, second, melding the two staffs, who may have different philosophies and procedures. She also notes that these mergers present opportunities for reorganizing space,



rethinking curriculum, and gaining access to additional resources. EJ 220 512.

Utilization of Surplus School Buildings. CEFP Journal, v17 n4 p10-11 Jul-Aug 1979. Reprint: UMI. The advantages and disadvantages of five alternative ways of using surplus space available to school systms are presented. EJ 209 474.

Ways of Dealing with Enrollment Decline. Phi Delta Kappan, v60 nl p20-5 1978. Reprint: UMI. Consultants from Livonia (Michigan), New Orleans, Salt Lake City, and Seattle discuss the impact of declining enrollments on the schools and some of the actions school districts are taking to cope with the decline. EJ 186 671.

Zusman, Richard S. Declining Enrollments and Reduction in Force: A Problem of the 70's. Clearing House, v51 n8 p396-9 1978. Reprint: UMI. In spite of an apparently gloomy outlook, there are many positive aspects to declining enrollments in elementary and secondary schools. Offers several suggestions for dealing with newly acquired surplus space in these schools, lists four stages to follow when closing a school and reducing the size of staff in a school district, and describes five steps to heed when a school district's enrollment drastically declines. EJ 182 790.

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